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PROGRAM LIBRARY

DECUS NO.	8-276
TITLE	CORE EDITOR
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COMPANY	Wilton High School Wilton, Connecticut
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SOURCE LANGUAGE	PAL III

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DEC 25

THURSDAY, 25 DEC 1951



CORE EDITOR

DECUS Program Library Write-up

DECUS No. 8-276

Explanation of program:

List command: Gives an octal listing of the location(s) designated.

Example: LIST 1234,1237 or LIST 1261

Change command: Changes the location indicated to the octal number indicated.

Example: CHANGE 1234 TO 7300

Write command: Writes in binary format on tape the contents of the locations indicated by the user. It gives an accurate checksum at the end.

Example: WRITE 1261, 1277

M command: Upon pressing the M key on the teletype the computer will respond with, (=), and will wait for the user to type in an octal number after which the teletype will return and line feed. The memory will be set to the number inputted with the exception of locations 6600 to 7777.

Example: M = 7000

Search command: The computer will wait for a number to be searched for, and a location to start from. If the user wants to search for the next occurrence of the number, he types a "C" (Continue), or if the user wishes to exit from the routine he types an "H" (Halt).

Example: SEARCH 7300 FROM 0000

R command: Runs a program in core after the user types the starting address of the program.

Example: R 0000 - Runs a program that starts at 0

Insert command: Inserts a number in core at a given location. Upon pressing a space it increments the location and waits for the user to type in what he wants there. If the user wants to exit from the program, he types a dollar sign.

Example: INSERT 1256

See: SAMPLE OF RUN

Note: All octal number input must be 4 digits.

/AB: CORE EDITOR
 /WRITE COMMAND
 /BINARY PUNCH ROUTINE

*66000

66000	4765	BNWT,	JMS I TAKE
66001	1366		TAD SPAC
66002	7640		SZA CLA
66003	5200		JMP BNWT
66004	4320		JMS STRT
66005	3367		DCA HLD6
66006	4765		JMS I TAKE
66007	1370		TAD CAMA
66100	7640		SZA CLA
66111	5771		JMP I ERRR
66112	4320		JMS STRT
66113	3372		DCA HLD9
66114	4751		JMS I ZCOR
66115	4302		JMS CRLF
66116	4220		JMS LDER
66117	5231		JMP NNOX
66200	00000	LDER,	0
66211	1375		TAD N200
66222	7040		CMA
66233	3374		DCA NCCX
66244	1375	NNOR,	TAD N200
66255	4764		JMS I TYP8
66266	2374		ISZ NCCX
66277	5224		JMP NNOR
66300	5620		JMP I LDER
66311	1367	NNOX,	TAD HLD6
66322	0360		AND LOCA
66333	4757		JMS I RTRX
66344	1361		TAD PDP9
66355	4311		JMS CHEK
66366	4764		JMS I TYP8
66377	1367		TAD HLD6
66400	0363		AND PDP7
66411	4311		JMS CHEK
66422	4764		JMS I TYP8
66433	1372	TRST,	TAD HLD9
66444	7040		CMA
66455	1367		TAD HLD6
66466	3362		DCA NCCD
66477	1767	TOKI,	TAD I HLD6
66500	4266		JMS BPUN
66511	2367		ISZ HLD6
66522	2362		ISZ NCCD
66533	5247		JMP TOKI
66544	1356		TAD REM2
66555	0360		AND LOCA

/HOLD FRST NUMBER

/HOLD SECOND NUMBER

6656	4757		JMS I RTRX
6657	4764		JMS I TYP8
6660	1356		TAD REM2
6661	0363		AND PDP7
6662	4764		JMS I TYP8
6663	1360		TAD LOCA
6664	4220		JMS LDER
6665	5777		JMP I RDYX
6666	0000	BPUN,	Ø
6667	3376		DCA LTPX
6670	1376		TAD LTPX
6671	0360		AND LOCA
6672	4757		JMS I RTRX
6673	4311		JMS CHEK
6674	4764		JMS I TYP8
6675	1376		TAD LTPX
6676	0363		AND PDP7
6677	4311		JMS CHEK
6700	4764		JMS I TYP8
6701	5666		JMP I BPUN
6702	0000	CRLF,	Ø
6703	7300		CLA CLL
6704	1350		TAD N222
6705	4764		JMS I TYP8
6706	1373		TAD NN12
6707	4764		JMS I TYP8
6710	5702		JMP I CRLF
6711	0000	CHEK,	Ø
6712	3355		DCA TLS2
6713	1355		TAD TLS2
6714	1356		TAD REM2
6715	3356		DCA REM2
6716	1355		TAD TLS2
6717	5711		JMP I CHEK
		/SUBROUTINE FOR INPUTTING OCTAL	
6720	0000	STRT,	Ø
6721	4765		JMS I TAKE
6722	0354		AND SNER
6723	4753		JMS I RTLS
6724	7006		RTL
6725	7004		RAL
6726	3346		DCA FRST
6727	4765		JMS I TAKE
6730	0354		AND SNER
6731	4753		JMS I RTLS
6732	3347		DCA SCND
6733	4765		JMS I TAKE
6734	0354		AND SNER
6735	7006		RTL
6736	7004		RAL

6737	3352		DCA THRD
6740	4765		JMS I TAKE
6741	0354		AND SNER
6742	1346		TAD FRST
6743	1347		TAD SCND
6744	1352		TAD THRD
6745	5720		JMP I STRT
6746	0000	FRST,	0
6747	0000	SCND,	0
6750	0215	N222,	215
6751	7103	ZCOR,	IPUT
6752	0000	THRD,	0
6753	7461	RTLS,	RTLX
6754	0007	SNER,	0007
6755	0000	TLS2,	0
6756	0000	REM2,	0
6757	7267	RTRX,	RTRS
6760	7700	LOCA,	7700
6761	0100	PDP9,	0100
6762	0000	NCCD,	0
6763	0077	PDP7,	0077
6764	7453	TYP8,	PRTN
6765	7111	TAKE,	TYIN
6766	7540	SPAC,	7540
6767	0000	HLD6,	0
6770	7524	CAMA,	7524
6771	7476	ERRR,	ERCN
6772	0000	HLD9,	0
6773	0212	NN12,	212
6774	0000	NCCX,	0
6775	0200	N200,	200
6776	0000	LTPX,	0
6777	7003	RDYX,	REDY
		/START OF PROGRAM	
		*7000	

7000	7300		CLA CLL
7001	6046		TLS
7002	6032		KCC
7003	5765	REDY,	JMP I XCOR
7004	1366	NTPE,	TAD ASTR
7005	4315		JMS TYPT
7006	4311		JMS TYIN
7007	3362		DCA TEM8
7010	1362		TAD TEM8
7011	1347		TAD MEMD
7012	7650		SNA CLA
7013	5746		JMP I XPPP
7014	1362		TAD TEM8
7015	1350		TAD CCHK

/TYPE READY
/CHECK FOR COMMANDS

7016	7650		SNA CLA	
7017	5276		JMP SCOR	
7020	1362		TAD TEM8	
7021	1355		TAD INSR	
7022	7650		SNA CLA	
7023	5322		JMP OCOR	
7024	1362		TAD TEM8	
7025	1353		TAD SRCH	
7026	7650		SNA CLA	
7027	5754		JMP I XRUN	
7030	1362		TAD TEM8	
7031	1376		TAD WRTE	
7032	7650		SNA CLA	
7033	5777		JMP I WRIT	
7034	1362		TAD TEM8	
7035	1363		TAD CHNG	
7036	7650		SNA CLA	
7037	5252		JMP BEGN	
7040	1362		TAD TEM8	
7041	1364		TAD LIST	
7042	7440		SZA	
7043	5771		JMP I NRON	
7044	4311	LOOK,	JMS TYIN	/CHECK FOR SPACE
7045	1372		TAD SPCE	
7046	7640		SZA CLA	
7047	5244		JMP LOOK	
7050	4767	LSTC,	JMS I INDR	
7051	5774		JMP I NDOP	
7052	4311	BEGN,	JMS TYIN	/CHANGE COMMAND, ROUTINE
7053	1372		TAD SPCE	
7054	7640		SZA CLA	
7055	5252		JMP BEGN	
7056	4767	DEC2,	JMS I INDR	/GET FIRST NUMBER
7057	3375		DCA NSIR	
7060	4311		JMS TYIN	/CHECK FOR FORMAT
7061	1372		TAD SPCE	
7062	7440		SZA	
7063	5771		JMP I NRON	
7064	4311		JMS TYIN	
7065	4311		JMS TYIN	
7066	4311		JMS TYIN	
7067	4767		JMS I INDR	/GET SECOND NUMBER
7070	3361		DCA HTHR	
7071	4303		JMS IPUT	
7072	4756		JMS I CRLN	
7073	1361		TAD HTHR	
7074	3775		DCA I NSIR	
7075	5203		JMP REDY	
7076	4311	SCOR,	JMS TYIN	
7077	4767		JMS I INDR	

7100	3362		DCA TEM8
7101	4756		JMS I CRLN
7102	5762		JMP I TEM8
7103	0000	IPUT,	Ø
7104	7300		CLA CLL
7105	6031		KSF
7106	5305		JMP IPUT+2
7107	6036		KRB
7110	5703		JMP I IPUT
7111	0000	TYIN,	Ø
7112	4303		JMS IPUT
7113	4315		JMS TYPT
7114	5711		JMP I TYIN
7115	0000	TYPT,	Ø
7116	6041		TSF
7117	5316		JMP TYPT+1
7120	6046		TLS
7121	5715		JMP I TYPT
7122	4311	OCOR,	JMS TYIN
7123	1372		TAD SPCE
7124	7640		SZA CLA
7125	5322		JMP OCOR
7126	4767		JMS I INDR
7127	5770		JMP I LONN
7130	4756	NSSS,	JMS I CRLN
7131	4311		JMS TYIN
7132	3362		DCA TEM8
7133	1362		TAD TEM8
7134	1372		TAD SPCE
7135	7650		SNA CLA
7136	5752		JMP I SNOR
7137	1362	XRUU,	TAD TEM8
7140	1344		TAD DLLR
7141	7650		SNA CLA
7142	5745		JMP I RDDY
7143	5771		JMP I NRON
7144	7534	DLLR,	7534
7145	7003	RDDY,	REDY
7146	7325	XPPP,	RUSB
7147	7463	MEMD,	7463
7150	7456	CCHK,	7456
7151	0000	SECN,	Ø
7152	7534	SNOR,	ICOR
7153	7455	SRCH,	7455
7154	7224	XRUN,	SERH
7155	7467	INSR,	7467
7156	6702	CRLN,	CRLF
7157	7461	0000	7461
7160	7454	TTTT,	7454

7161	ØØØØ	HTHR,	Ø
7162	ØØØØ	TEM8,	Ø
7163	7475	CHNG,	7475
7164	7464	LIST,	7464
7165	7436	XCOR,	NOW2
7166	Ø252	ASTR,	252
7167	672Ø	INDR,	STRT
717Ø	7532	LONN,	INST
7171	7476	NRON,	ERCN
7172	754Ø	SPCE,	754Ø
7173	7563	RETN,	7563
7174	725Ø	NDOP,	NDOX
7175	ØØØØ	NSIR,	Ø
7176	7451	WRTE,	7451
7177	66ØØ	WRIT,	BNWT

*72ØØ

/SERCH ROUTINE

72ØØ	1366	NOW3,	TAD CORE
72Ø1	1362		TAD HHHH
72Ø2	764Ø		SZA CLA
72Ø3	5754		JMP I XPRR
72Ø4	5745		JMP I RDYY
72Ø5	1351	TUNE,	TAD PARR
72Ø6	4274		JMS OTPT
72Ø7	477Ø		JMS I XNOR
721Ø	1751		TAD I PARR
7211	4274		JMS OTPT
7212	476Ø		JMS I CRXH
7213	4763	LISN,	JMS I READ
7214	3366		DCA CORE
7215	1366		TAD CORE
7216	1361		TAD CCCC
7217	764Ø		SZA CLA
722Ø	52ØØ		JMP NOW3
7221	476Ø		JMS I CRXH
7222	2351		ISZ PARR
7223	5241		JMP HETR
7224	4763	SERH,	JMS I READ
7225	1346		TAD TKS2
7226	764Ø		SZA CLA
7227	5224		JMP SERH
723Ø	4752		JMS I STRZ
7231	335Ø		DCA LOC5
7232	4753		JMS I FROM
7233	4752		JMS I STRZ
7234	3351		DCA PARR
7235	476Ø		JMS I CRXH
7236	135Ø		TAD LOC5
7237	7Ø41		CIA
724Ø	3347		DCA NXT4

7241	1751	HETR,	TAD I PARR	
7242	1347		TAD NXT4	
7243	7650		SNA CLA	
7244	5205		JMP TUNE	
7245	2351		ISZ PARR	
7246	5241		JMP HETR	
7247	5745		JMP I RDYY	
7250	3344	NDOX,	DCA HOLD	
7251	4763	NDOR,	JMS I READ	
7252	3375		DCA CPXP	
7253	1375		TAD CPXP	
7254	1364		TAD RETR	
7255	7640		SZA CLA	
7256	5765		JMP I XOR	
7257	4760		JMS I CRXH	
7260	1344		TAD HOLD	
7261	4274		JMS OTPT	
7262	4770		JMS I XNOR	
7263	1744		TAD I HOLD	
7264	4274		JMS OTPT	
7265	4760		JMS I CRXH	
7266	5767		JMP I LOCC	
7267	0000	RTRS,	0	
7270	7112		CLL RTR	
7271	7012		RTR	
7272	7012		RTR	
7273	5667		JMP I RTRS	
7274	0000	OTPT,	0	/OUTPUT OCTAL SUBROUTINE
7275	3366		DCA CORE	
7276	1366		TAD CORE	
7277	0367		AND LOCC	
7300	4267		JMS RTRS	
7301	7012		RTR	
7302	7010		RAR	
7303	1374		TAD INCR	
7304	4743		JMS I PRTT	
7305	1366		TAD CORE	
7306	0371		AND LOC2	
7307	4267		JMS RTRS	
7310	1374		TAD INCR	
7311	4743		JMS I PRTT	
7312	1366		TAD CORE	
7313	0372		AND LOC3	
7314	7012		RTR	
7315	7010		RAR	
7316	1374		TAD INCR	
7317	4743		JMS I PRTT	
7320	1366		TAD CORE	
7321	0373		AND LOC4	
7322	1374		TAD INCR	

7323	4743		JMS I PRTT	
7324	5674		JMP I OTPT	
7325	4770	RUSB,	JMS I XNOR	
7326	4752		JMS I STRZ	
7327	3366		DCA CORE	
7330	4760		JMS I CRXH	
7331	1366	RCOR,	TAD CORE	
7332	3756		DCA I ACOR	
7333	2356		ISZ ACOR	
7334	7000		NOP	
7335	1356		TAD ACOR	
7336	1357		TAD TST3	
7337	7640		SZA CLA	
7340	5331		JMP RCOR	
7341	3356		DCA ACOR	
7342	5745		JMP I RDYY	
7343	7453	PRTT,	PRTN	
7344	0000	HOLD,	0	
7345	7003	RDYY,	REDY	
7346	7540	TKS2,	7540	
7347	0000	NXT4,	0	
7350	0000	LOC5,	0	
7351	0000	PARR,	0	
7352	6720	STRZ,	STRT	
7353	7514	FROM,	FRM2	
7354	7476	XPRR,	ERCN	
7355	7103	NPUT,	IPUT	
7356	0000	ACOR,	0	
7357	1200	TST3,	1200	
7360	6702	CRXH,	CRLF	
7361	7475	CCCC,	7475	
7362	7470	HHHH,	7470	
7363	7111	READ,	TYIN	
7364	7563	RETR,	7563	
7365	7400	XROR,	EROR	
7366	0000	CORE,	0	
7367	7000	LOCC,	7000	
7370	7466	XNOR,	TYP5	
7371	0700	LOC2,	0700	
7372	0070	LOC3,	0070	
7373	0007	LOC4,	0007	
7374	0260	INCR,	260	
7375	0000	CPXP,	0	
		*7400		
7400	1776	EROR,	TAD I SCRN	/HOLD FIRST NUMBER
7401	3351		DCA XHLD	
7402	1353		TAD COMA	
7403	1775		TAD I CPXX	
7404	7640		SZA CLA	
7405	5276		JMP ERCN	
7406	4765		JMS I XXXX	
7407	3355		DCA KEEP	/HOLD SECOND NUMBER

7410	4777	XNOW,	JMS I NIKN	
7411	1356		TAD RTRN	
7412	7440		SZA	
7413	5276		JMP ERCN	
7414	4770		JMS I CRLX	
7415	1355	DORX,	TAD KEEP	
7416	7040		CMA	
7417	1351		TAD XHLD	
7420	3364		DCA RKEP	
7421	1351	NOTT,	TAD XHLD	
7422	4766		JMS I NCCR	
7423	4266		JMS TYP5	
7424	1751	GONE,	TAD I XHLD	
7425	4766		JMS I NCCR	
7426	4770		JMS I CRLX	
7427	2364		ISZ RKEP	
7430	5232		JMP INTR	
7431	5773		JMP I XXRT	
7432	1351	INTR,	TAD XHLD	
7433	7001		IAC	
7434	3351		DCA XHLD	
7435	5221		JMP NOTT	
7436	4770	NOW2,	JMS I CRLX	/READY SUBROUTINE
7437	1357		TAD N322	
7440	4253		JMS PRTN	
7441	1360		TAD N305	
7442	4253		JMS PRTN	
7443	1361		TAD N301	
7444	4253		JMS PRTN	
7445	1362		TAD N304	
7446	4253		JMS PRTN	
7447	1363		TAD N331	
7450	4253		JMS PRTN	
7451	4770		JMS I CRLX	
7452	5750		JMP I XTUR	
7453	0000	PRTN,	0	
7454	6041		TSF	
7455	5254		JMP PRTN+1	
7456	6046		TLS	
7457	7300		CLA CLL	
7460	5653		JMP I PRTN	
7461	0000	RTLX,	0	
7462	7106		CLL RTL	
7463	7006		RTL	
7464	7006		RTL	
7465	5661		JMP I RTLX	
7466	0000	TYP5,	0	
7467	1371		TAD N240	

7470	4253		JMS PRTN
7471	1372		TAD N275
7472	4253		JMS PRTN
7473	1371		TAD N240
7474	4253		JMS PRTN
7475	5666		JMP I TYP5
7476	7300	ERCN,	CLA CLL
7477	4770		JMS I CRLX
7500	1360		TAD N305
7501	4253		JMS PRTN
7502	1357		TAD N322
7503	4253		JMS PRTN
7504	1357		TAD N322
7505	4253		JMS PRTN
7506	1374		TAD N317
7507	4253		JMS PRTN
7510	1357		TAD N322
7511	4253		JMS PRTN
7512	4770		JMS I CRLX
7513	5773		JMP I XXRT
7514	0000	FRM2,	0
7515	1371		TAD N240
7516	4253		JMS PRTN
7517	1347		TAD N306
7520	4253		JMS PRTN
7521	1357		TAD N322
7522	4253		JMS PRTN
7523	1374		TAD N317
7524	4253		JMS PRTN
7525	1346		TAD N315
7526	4253		JMS PRTN
7527	1371		TAD N240
7530	4253		JMS PRTN
7531	5714		JMP I FRM2
7532	3345	INST,	DCA HLDA
7533	5743		JMP I CRED
7534	1345	ICOR,	TAD HLDA
7535	4766		JMS I NCCR
7536	4266		JMS TYP5
7537	4744		JMS I STRX
7540	3745		DCA I HLDA
7541	2345		ISZ HLDA
7542	5743		JMP I CRED
7543	7130	CRED,	NSSS
7544	6720	STRX,	STRT
7545	0000	HLDA,	0
7546	0315	N315,	315
7547	0306	N306,	306
7550	7004	XTUR,	NTPE

7551	øøøø	XHLD,	ø
7552	øøøø	TEM2,	ø
7553	7524	COMA,	7524
7554	ø254	N254,	254
7555	øøøø	KEEP,	ø
7556	7563	RTRN,	7563
7557	ø322	N322,	322
756ø	ø3ø5	N3ø5,	3ø5
7561	ø3ø1	N3ø1,	3ø1
7562	ø3ø4	N3ø4,	3ø4
7563	ø331	N331,	331
7564	øøøø	RKEP,	ø
7565	672ø	XXXX,	STRT
7566	7274	NCCR,	OTPT
7567	71ø3	XPUT,	IPUT
757ø	67ø2	CRLX,	CRLF
7571	ø24ø	N24ø,	24ø
7572	ø275	N275,	275
7573	7øø3	XXRT,	REDY
7574	ø317	N317,	317
7575	7375	CPXX,	CPXP
7576	7344	SCRN,	HOLD
7577	7111	NIKN,	TYIN

ACOR	7356
ASTR	7166
BEGN	7ø52
BNWT	66øø
BPUN	6666
CAMA	677ø
CCCC	7361
CCHK	715ø
CHEK	6711
CHNG	7163
COMA	7553
CORE	7366
CPXP	7375
CPXX	7575
CRED	7543
CRLF	67ø2
CRLN	7156
CRLX	757ø
CRXH	736ø
DEC2	7ø56
DLLR	7144
DORX	7415
ERCN	7476
EROR	74øø
ERRR	6771

FRM2	7514
FROM	7353
FRST	6746
GONE	7424
HETR	7241
HHHH	7362
HLDA	7545
HLD6	6767
HLD9	6772
HOLD	7344
HTHR	7161
ICOR	7534
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